ABSTRACT OF THE DISCLOSURE

A tire condition monitoring apparatus that improves data communication accuracy. Permanent magnets are fixed to the wheel well. A transmitter fixed to a tire includes a pressure sensor for detecting the air pressure of the tire and an MI sensor for detecting magnetic fields generated by the permanent magnets. As the tire rotates, the positions of the permanent magnets relative to the MI sensor change. Thus, the intensity of the magnetic field acting on the MI sensor changes. The transmitter determines the rotation angle of the tire based on the detection of the MI sensor. When the rotation angle of the tire is in a range optimal for wireless communication, the transmitter transmits the air pressure data generated by the pressure sensor.

CERTIFICATE UNDER 37 CFR 110: The undersigned hereby cartiles that this paper or papers, as described hereinabove, are being deposited in the United States Postal Service Express Mail Post Office to Addressee having an Express Mail Mailing label number of:

EV 333854141 US

In an envelope addressed to:

Assistant Commissioner for Patents
Washington, DC 20231

on this 27thday of October 20 03

Crompton, Seager & Tufte, LLC